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(Private Copy, printed only for friends.)

#### THE

# HUNTERIAN ORATION,

For 1851.

#### BY R. A. STAFFORD, F.R.C.S.

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## PREFACE.

SEVERE indisposition having prevented my delivering the Hunterian Oration for the year 1851, I feel it due to the Profession and myself to print it. It will be seen that it was never intended to be scientific, and that it was written more for speaking than as a literary composition. members of the Profession requested me not to deliver a cold, dry discourse, without even perhaps mentioning the name of Hunter,—but to make it really Hunterian. This I did not find easy to do; for, on the one hand, it had already been repeated thirty-four times, and, on the other, I found that so little had been added to science this last year, that I had nothing new to say. I therefore thought I could not do better than to speak of those whom we most of us had known. They really were the immediate followers of Mr. Hunter, and many of them had seen him, and had been his pupils;—indeed, they had derived most of their knowledge from him. We may, therefore, equally acknowledge that we have derived ours from them.

I should have printed the Oration before, but I had private reasons for not doing so.



### Mr. President and Gentlemen,—

The honour of delivering the Hunterian Oration having devolved on me, I undertake it with great diffidence, having never performed a duty of this kind. This is the 35th repetition. The Hunterian Anniversary was founded by Sir Everard Home and Dr. Baillie, to commemorate the genius and public services of their immortal kinsman.

John Hunter—like Shakspeare, Milton, Newton, Burns, Watt, and many others who have been raised by their genius above their fellow men—was not of high birth. He was born of respectable parents, who possessed and cultivated a small freehold estate, but they were not rich. They resided in an obscure village called Long Calderwood, near Glasgow. They had a numerous family. John Hunter,—the youngest of ten children,—was born in 1728. It is said that he was a spoilt child, and that his education was neglected. Of his early life little is known, excepting that he was an idler and loiterer about home—that he did not like the restraint of school, and had no taste for the study of languages. The objects presented to him by the ordinary routine of education evidently took no hold on his mind, and nothing had yet occurred to arouse his apparently dormant faculties,—to afford any presage of those extraordinary powers which, after astonishing his contemporaries, have commanded the universal admiration of his successors. When he looked back in after life upon the difficulties that he had to contend with in his youth, well might he exclaim with the bard of his native country—

"Ah! who can tell how hard it is to climb
The steep where Fame's proud temple shines afar.
Ah! who can tell how many a soul sublime,
Has felt the influence of malignant star,
And wag'd with fortune an eternal war.
Check'd by the scoff of pride, by envy's frown,
And poverty's unconquerable bar,—
In life's low vale remote has pined alone,
Then dropp'd into the grave, unpitied, and unknown!"

But this was not to be the fate of John Hunter. It appeared as if an Almighty hand was upon him, leading him forth from obscurity to institute new and arduous researches—to open fresh paths of knowledge—to set forth the true principles of the healing art—and thus to enhance the scientific glory of England, and to benefit all mankind. His brother William, who had been settled some years in London as a physician, and had already distinguished himself by his talents and learning, invited him to the metropolis. John Hunter was at this time about twenty years of age. Before he left his native country he had conceived a strong desire to apply himself to anatomy and surgery, and it is not improbable that Dr. W. Hunter may have reasoned somewhat in this manner:—

"My brother John is now just entering upon life. Hitherto he has been living at home, without employment,—merely a burden upon his mother. Instead of leaving him in the country to waste his time, let me invite him up to London to try his chance in the world. If there is anything in him, he will have an opportunity of making it good. I have no reason to suppose that he has any extraordinary ability, but at all events I can put him in a way to earn his bread."

The invitation was thankfully accepted. Little did Dr. William Hunter think at that time the benefit he was about

to bestow on mankind, and the powerful and brilliant light he was about to pour forth upon the future science of the world, by patronising his simple-minded brother;—little did he dream that this youth would be the corner-stone of this College, and that his labours and genius would astonish the learned of all nations;—little did he suppose that he would by his own work and industry found a museum, the admiration of all scientific men of every country—a museum unrivalled in arrangement, and unequalled in specimens.

We can easily conceive a raw youth coming from a remote part of this kingdom, without any previous initiation into the profession, with hardly an idea of what anatomy, physiology, physic, and surgery were,—the astonishment he must have felt on his first introduction to the lecture and dissecting room. Thrown entirely among strangers, with no one that he had ever seen before, except his brother, who, from being so much older than himself, and occupying so high a position, must naturally have been more or less a restraint upon him,—what must have been his feelings!

Among the members of my own profession there are many that can bear testimony, from their own experience, to the hollow feeling of isolation that must await the student on his being first cast upon the vast wilderness of London. But it is only those who, to superior abilities unite that strong will, without which nothing great can be achieved, that can form an adequate conception of what must have been, at the commencement of his professional studies, the workings of John Hunter's mind! It is natural that he should have felt abashed and shy. But his was not that self-regarding shyness, that consists in a sensitive timidity as to external appearances;—his was not the bashfulness that damps the energy of the mind. No, what he felt and experienced was that deep consciousness of ignorance, so emphatically pronounced by Socrates to be the first step

towards knowledge. Feeling the deficiencies of his early education, he applied himself resolutely to remove them.

The lectures delivered by his brother, and the society of the able and enlightened men whom the Doctor had gathered round him, opened to him a new world,—poured into his mind a flood of new ideas, which awakened his hitherto latent powers: his understanding opened as a flower expands under the genial influence of the sun. Here he was taught to think; and in those thoughts what truths did come! Here the book of Nature was at once opened to him, and how he studied that book the museum within these walls will show. He almost immediately entered the dissecting room, and became a good anatomist, so that in the season after his arrival he was able to prepare the parts for his brother's lectures. Here he first acquired the taste for research; and animated by the ardent desire of unfolding and understanding the organization and living actions of animals, he found the necessity of investigating and thinking for himself. Hence it was that Mr. Hunter derived that ardent love for the science of the profession, which incited him to incessant exertion, enabling him, not only to embellish and extend but to give it an entirely new form. He courted Nature, and Nature unfolded herself to him! Struck with the mighty majesty of Him, who, being perfect, made all perfect, his genius traced the greatness of God in the wonders of the animal frame!

It is singular,—but it bears out what one of our poets has said, that "there is a sympathy of souls,"—that Cheselden found out Hunter within a year after his arrival in London. No doubt his brother introduced him; but what marks Cheselden's extraordinary perception of genius is, that he at once discovered his natural talent. Genius appears to discover genius. A man of genius shows it by instinctively finding it out in those who have it. Genius is

as "from the Godhead caught:" it is like poetry, born with us. In fact, it is itself poetry! It is a mind exalted by Nature above the common standard of mankind. Genius is the very soul of truth! it seeks it—it loves it—and it proclaims it to the world. It is

"A ray of Him who form'd the whole,
A glory circling round the soul."

Like the sun, it is not only a body of itself which sheds forth rays of heat and light, and other qualities to all the planets that move around its orbit; but genius, like that vast body, not only exists in the individual who possesses it, but it enables him to enlighten and impart knowledge to all those who are within his sphere.

It appears to me, that Hunter, as a man of natural genius, more resembled Shakspeare than any other man, and there were many features in their career which were not unlike. We see this mighty poet born of parents in a similar grade of life—humble, but respectable. Their education was much the same. They were, so far as early education is concerned, half educated. The father of Shakspeare having ten children, could not afford the time for education, and took his son from school. Shakspeare, from not being fully employed, fell into loose and idle company, and as a frolic, in taking from a gentleman's park a deer, was in consequence obliged to quit his home. He came to London about the period of life Mr. Hunter did,—the age of 20, and was upon the stage, which brought forth his genius. The mightiness of his language—the loftiness of his sentiments,—and his Godlike ideas, at once enlighten and exalt the soul. His knowledge of the mind, and his power of entering into the secret thoughts and depths of the human heart, whether they were of the highest or lowest quality, has surpassed all mankind!

I now return to Mr. Hunter. I have said there is some similarity between the lives of Hunter and Shakspeare.

The former in his youth had no occupation. His parents resembled Shakspeare's in fortune. They were respectable, well descended, but not rich. He was one of ten children,—so was Shakspeare. He came to London at the age of 20, to seek his fortune,—so did Shakspeare; and as Shakspeare sits in mighty majesty as a poet, before all poets, so does Hunter before all anatomists, physiologists, naturalists, and surgeons.

It is impossible to speak of John Hunter without mentioning the name of Dr. William Hunter. For many years the two brothers lived in the same atmosphere of research, and they were in fact "a union in partition." The profession, and the world at large, owe a deep debt of gratitude to William Hunter, not only for introducing his brother to the world, but also for his own valuable and meritorious labours in the field of science. Dr. W. Hunter came to London ten years before his brother; he had received a classical education, and was an accomplished scholar. He may be said to be the founder of the modern English schools of anatomy; for, to use his own words, speaking of the lectures of that day-"Here I learned a good deal by my ears, but almost nothing by my eyes, and therefore hardly anything to the purpose. The defect was, that the professor was obliged to demonstrate all the parts of the body, except the bones, nerves, and bloodvessels, upon one dead body,—the course of lectures lasting for six months. There was a feetus for the nerves and bloodvessels, and the operations of surgery were explained, to very little purpose, on a dog!" Such was the state of anatomy in England in the year 1741, little more than a century ago. Dr. W. Hunter was the first to see that the only true road to the real knowledge of our profession was the minute study of the human body. Thanks to him, to his brother, and to those who followed in their footsteps, the science has been brought to that high state of development in which we now behold it with admiration:—nor, amid the aids that have of late years been given to the advancement of science, let us omit to mention with gratitude the improvements introduced by government into the laws relating to anatomy.

It has always appeared to me that the Hunterian Oration was not instituted merely for the purpose of commemorating the labours and genius of John Hunter. Science is essentially progressive. The utmost point at any time attained by the human mind, leaves still an undiscovered infinite beyond. The man of commanding genius is he that not only masters the known elements of science, but also so deals with the elements he has mastered as to impress a character on future discovery.

If I were called upon to-day to speak in commemoration of Lord Bacon, it would be no small matter to lay before you a view of what he himself had achieved for the advancement of learning. But a moment's reflection will convince you, that if this was all I did, I should fall far short of what was due to the memory of the man. The real greatness of Bacon consists in the character that he has impressed on the study of Philosophy. As with Bacon, so with John Hunter. Nor can I conceive any nobler tribute paid to his memory, than by rendering the honour that is due to those who have succeeded him.

The immortal Harvey has been the keystone of modern science. His grand discovery of the circulation of the blood at once annihilated all the hypotheses and theories of the ancients: it was "the dawning light" of the knowledge of physic, surgery, physiology, and even of life itself. Had not the circulation of the blood been known, even Hunter himself would have worked on a wrong foundation, and mystery would have hung around his researches. But it is more than probable that with his master mind, and his deep insight into nature, he himself would have

unravelled that mystery. In the train of Harvey followed Haller, Albinus, Morgagni, Camper, Monro, Pott, Cuvier, Cullen, Scarpa, and many others. All these great men live in their works, and on the present occasion it would be foreign to my purpose to descant on their merits. They have erected a monument to their memories which can never die!

I now proceed, Mr. President and Gentlemen, in furtherance of the views that I have expressed, to lay before you a few slight biographical sketches of some of the more distinguished amongst those who have trod in the steps of Mr. Hunter. I know not where I can begin more fitly than with Mr. Hunter's pupil and friend, Dr. Jenner.

Edward Jenner was born at Berkeley, in Gloucestershire, on the 17th of May, 1749, and was the third son of the Rev. Stephen Jenner, vicar of the parish. He came to London when he was 21 years of age, and at once became pupil to Mr. Hunter, and lived in his house. Although Mr. Hunter was just double the age of Jenner, yet their minds so assimilated, that a strong and lasting friendship sprang up between them: indeed, from some of Mr. Hunter's letters to him, it is evident that he had Jenner almost always in his thoughts.

Such expressions as these occur in them—"I received yours, and was extremely happy to hear of your success in business: I hope it will continue. I am obliged for your thinking of me, and particularly in natural history." In another—"I do not know any one I would sooner write to than you. I do not know any one I am so much obliged to," &c. Again—"I am very much obliged to you for your kind attention to me, and how to reward you I do not know." In short, Mr. Hunter's letters to him teem with the utmost friendship and regard, joined with the most dignified respect and gratitude. It is to be regretted that Dr. Jenner's part of the correspondence has not been

preserved, to complete the picture of their reciprocal attachment. The regard Dr. Jenner had for Hunter is so beautifully described by Dr. Baron, that I shall take leave to repeat his words.:—

"The boldness and independence of Mr. Hunter's character produced deep and permanent effects on all who witnessed them. Jenner in particular felt their power—he saw a master spirit advancing steadily in that walk of knowledge to which he himself was led by all the predilections of his taste, and all the influence of his early habits. He saw a kind, free, and manly nature devoted to the acquisition of science, and putting away from him entirely the selfish and personal considerations, which are too apt to encumber the researches, and circumscribe the objects, of less enlightened minds. The heart of Jenner was peculiarly alive to virtues of this kind, and he had moreover an intellect fully capable of appreciating and admiring other qualities of his master: it was a singular felicity which brought such men together. The pupil not only respected the teacher, but he loved the man. There was in both a directness and plainness of conduct, an unquenchable desire of knowledge, and a congenial love of truth!"

The discovery of Vaccination is—for the importance of its result—to be equalled only by that of the Circulation of the Blood. The one has placed us in a true position to gain a knowledge of disease in general—the other has afforded us the means of extirpating one of the severest scourges that ever afflicted the human race. The perseverance of Dr. Jenner in following up this discovery is surprising:—he not only himself made experiments and inquiries, but he took every opportunity of stimulating others to do the same. He was fully sensible of the importance of the knowledge that he was in search of, and accordingly he worked with the greatest assiduity—sparing

no labour—no pains—no effort, to attain his ends. Vaccination has saved the lives of thousands. There is no Government in the civilized world, and more particularly that of England, that does not acknowledge, with a deep sense of gratitude, the benefit man has received, under Providence, from the hands of Dr. Jenner.

Dr. Jenner's mind was of a very superior order. He was a first-rate naturalist—so much so, that Sir Joseph Bankes, from due appreciation of his merit, was anxious to place him in a position to advance that science; but being fond of the country, Jenner refused to accept any appointment of that description.

In his private character Dr. Jenner was a man of the utmost kindness and sociability, and singularly devoid of ambition. Though endowed with great and acknowledged genius, he had no other aspiration than to live in his native village, and amongst his natural born friends. All he appeared to care for, like Hunter, was the advancement of science, and doing good to his fellow creatures. There was, however, one trait in his character which was particularly beautiful,—he loved the members of his own profession, and he enjoyed the society of his medical friends. There were two clubs that he belonged to—the one he termed the "Medico-convivio," and the other the "Conviviomedico." The names indicate the pleasure he took in the society of his professional brethren. It is a good example Dr. Jenner set—would to God it were more generally followed! I should like to see "medico-convivio" and "convivio-medico" societies all over England. Such meetings could hardly fail to create a sociability amongst us that might lead to great good.

Besides being a naturalist, Dr. Jenner was a musician and a poet. In music he composed many pretty light airs, but he has written some poetry which, in my opinion, is worthy of any of our English poets. I shall take the liberty to make an extract. It was written on the occasion of Berkeley Fair:—

"The sun drove off the twilight grey, And promised all a cloudless day; His yellow beams dane'd o'er the dews, And chang'd to gems their pearly hues. The song-birds met on ev'ry spray, And sang as if they knew the day. The blackbird pip'd his mellow note, The goldfinch strain'd his downy throat; To join the music of the plain, The lark poured down no common strain; The little wren, too, left her nest, And striving sang her very best. The robin wisely kept away, His song too plaintive for the day. 'Twas Berkeley fair, and nature's smile Spread joy around for many a mile. The rosy milkmaid quits her pail, The thresher now puts by his flail; His fleecy charge, and hazel crook, By the rude shepherd are forsook: The woodman, too, the day to keep, Leaves echo undisturb'd in sleep. Labour is o'er—his rugged chain Lies rusting on the grassy plain."

Our profession has to boast of four poets—Akenside, Darwin, Jenner, and Garth.

I shall conclude this slight notice of Dr. Jenner by relating a circumstance which occurred when England and France were at enmity with one another. My anecdote shows the estimation he was held in even by the enemies of his country. When war broke out, after the short peace of Amiens, among our countrymen, who were in an unjustifiable manner detained by Buonaparte as prisoners, there happened to be two or three friends of Dr. Jenner's. Persons of the greatest influence used all their interest in their favour, but Napoleon was

not to be moved. At length an application was made to him by Dr. Jenner. As soon as he heard the name of Jenner, he said, in an emphatic manner, "I can refuse nothing to the greatest benefactor of mankind: let them go free!" Their passports were immediately made out—they were escorted through the country in safety, and soon set foot on the English shore, much to the joy of their family and friends. Thus, in the midst of war and commotion, Jenner's certificate served as a passport where no other passport was admitted!

The next individual I shall speak of is Dr. Baillie. was the nephew of Mr. Hunter, and, as I have said before, was one of the founders of this Oration. He was born in 1761, and began his career under the auspices of Dr. William Hunter, who persuaded him to follow this profession. He became a good anatomist, and demonstrated at an early age, and when not more than twenty-two was a Professor in the Hunterian School in Windmill Street. Dr. William Hunter dying a year afterwards, left him the museum, the school, and also the rest of his fortune; but Dr. Baillie had the generosity to give to Mr. Hunter the family estate. With Mr. Cruikshank he carried on the school for some years, and at length retired. In 1787 he was appointed Physician to St. George's Hospital, and in two years afterwards he received his degree of Doctor in Medicine at Oxford, and became the most eminent man of his day. What particularly distinguished him was his work on Morbid Anatomy—the drawings of which were executed by Mr. Clift. This book had a good effect in stimulating physicians and surgeons to cultivate pathological anatomy, and more particularly in the provinces. Dr. Baillie had a very generous and benevolent heart, and was particularly kind to the junior members of the profession. As an instance of this I shall relate an anecdote which occurred to myself:-When I was about 16 or 17 years of age, Dr. Baillie was at the height of his professional fame. I was educated in my early youth at Circnester, in Gloucester, and he had a seat in that neighbourhood. It happened that the gentlemen under whose tuition I was had an appointment to meet him in consultation at a few miles distant, but being sent for to urgent cases, they could not keep their appointment. They therefore dispatched me to inform him of it. Having arrived at the house where the consultation was to be held. I was ushered into the drawing-room. Presently a gentleman under the middle stature entered: I gave the message and the apologies. It was Dr. Baillie himself! Shaking me by the hand, he said, "Then we immediately will have a consultation." I told him I had just entered the profession, and was totally ignorant. He replied, "Never mind; I will any how introduce you to the patient." We went together, and he behaved to me as kindly and as courteously as if I had been his equal.

When, Sir, I mention the name of Abernethy, my audience will at once see the difficulty of the task that lies before me. I have now to speak of one who possessed a very powerful and enlightened mind,—of one whose talents and genius were of the highest order,—who was adored by his pupils, and honoured by all who knew him. I might say with the poet—

#### "He owned no common soul!"

The birthplace of Mr. Abernethy is unknown; but from his own record he was born in London, somewhere near Old Bethlem Hospital, a fortnight after his parents came from Ireland. He once mentioned to me that he was of Scotch extraction, and of a junior branch of a noble family of that country. It is very probable that his ancestors, as many of the Scotch did in former days,

migrated from Scotland to the north of Ireland, as his grandfather was an Irishman, and a minister of some eminence. It is not generally known at what school he received his early education. I happened to ascertain the fact in a very singular manner. While I was House-Surgeon at St. Bartholomew's Hospital, an old friend of mine, knowing that Mr. Abernethy had honoured me with his friendship, came to me and requested that I would introduce him. I took an opportunity of doing so while going round the wards of the hospital. Mr. Abernethy happened not to be in a good humour—something had displeased him, and all went wrong. He just spoke to my friend, then turned round abruptly, and took no more notice of him. My friend coloured up—evidently offended. After a short pause, he said, "Mr. Abernethy, this is not the first time I have seen you."—"Perhaps not," replied he, angrily.—"Yes, yes, sir. I was at the same school with you, and have seen you flogged many a time."---"Very likely," said Abernethy; "and I have seen you in the same situation, I dare say." Here the conversation ended; but it left me in possession of a fact which otherwise might never have been known. My friend was educated at Brewood, near Wolverhampton—a school of some celebrity in those parts; and there it was that Mr. Abernethy underwent what was in those days the ordinary routine of education. It is said that he received his education in Lothbury. Such might have been the case in his childhood days.

Mr. Abernethy was apprenticed to Sir Charles Blicke, at St. Bartholomew's Hospital, where he assiduously pursued his studies. It has been remarked of him by a distinguished orator of this College, that "he began to teach his profession at an age when others are occupied in learning it; that is, immediately after the expiration of his pupilage."

How he taught is well known to many of us! If truth, genius, intellect, eloquence, pathos, can describe Mr. Abernethy's method of teaching,—they were his! He was that individual who first, more particularly, pointed out that surgery was not only an art, but a science—and when he did so he placed it on a pinnacle above all other sciences. It is not surgeons alone who have to thank him for the grand principles he laid down upon the constitutional treatment of what had previously been considered merely local diseases; but physicians, also, many of whom, at this time, have obtained the foundation of their knowledge from his lectures. We owe to him several great men who now adorn this College and our profession. There is hardly a city or town in the provinces in which many of his pupils have not distinguished themselves.

The lectures delivered by Mr. Abernethy were of the most interesting description. He had a power of rivetting the attention of his pupils in a remarkable manner. His method of describing anatomy, and illustrating physiology and disease, were peculiar to himself. His bursts of eloquence, more particularly when he spoke of Hunter and Shakspeare, were extraordinary. In almost every lecture Hunter's name was mentioned, and with an enthusiasm not to be described. He knew the greatness of the man! He pointed out his views—he showed that surgery and physiology were combined, and that one could not exist without the other. He proved that physic and surgery were one science—that a surgeon without the knowledge of therapeutics and physiology was no surgeon at all.

I have said that Mr. Abernethy was a great admirer of Shakspeare. In his lectures he constantly quoted him, and with a power of elocution that was not unworthy of a Garrick or a Kean. I have heard him, at lecture, recite passages from Shakspeare that produced almost a paralysing effect on his audience. He proved the greatness of mind of the

poet by showing that he understood the passions of the mind, and human nature; and that anatomy and physiology bore out his knowledge. When he lectured on the knee, he quoted, "To crook the pregnant hinges of the knee,"—proving that Shakspeare was aware that the whole weight of the body rested on that joint. When on the nervous system, he was eloquent in his praises. He mentioned particularly the knowledge Shakspeare had of the sympathy of the stomach with the brain—quoting that beautiful passage where King Henry VIII. is made to say to Cardinal Wolsey, when he discarded him:

"Read o'er this;
And—after—this; and then to
Breakfast with what appetite you have."

Showing that he was fully aware that any sudden and violent emotion of the mind caused an instantaneous paralyzation of the powers of the stomach.

Mr. Abernethy was not without his peculiarities: his occasional roughness of manner is well known—probably this was in a great measure assumed. At all events it gave him an opportunity of making those witty remarks and sarcastic replies for which he was so celebrated. It has been said of him, that when he was a young man he suffered from shyness, and that in order to cover it he was driven to put on a false manner, which grew into a habit. Whether this is true, I know not. At all events he was of a very amiable and gentle disposition—always ready to serve a friend—or to lend a helping hand to those whom he considered to be deserving.

The humour Mr. Abernethy showed in his lectures was very amusing; but it was not merely for the purpose of amusement that he indulged in it. The stories he told were highly instructive and interesting. Who can forget, who ever heard it, the ludicrous and witty manner in which

he told the story of the officer who having once dislocated his jaw, was subject, if he opened his mouth too wide either by gaping or laughing, to the same accident? On his visiting a friend one day, who did not know of the circumstance, while laughing the accident occurred. poor officer, unable to speak, gesticulated, to show what was the matter. His country friends thought he was mad, and sent for the village apothecary, who came and confirmed their opinion, and went back to fetch a straight-waistcoat. The gentleman in the meantime made signs for pen, ink, and paper, and wrote "I have dislocated my jaw-for God's sake send for the surgeon of my regiment, who will reduce it in a minute, and get rid of that ignorant fool." The stories he told were related, not only to amuse, but to impress on his pupils' minds the importance of the facts

He had a very retentive memory. A friend of his—a poet—one day called upon him to read a piece of poetry that he had recently composed. Abernethy listened attentively to the end; then said, with that suppressed humour that all who knew him recollect.—" I think I remember those verses somewhere." "Impossible!" cried the poet; "I have only just written them, and have not shown them to a single soul." "To prove to you that I am not mistaken," replied Abernethy, "I will repeat them to you." He did so, line for line, word for word. The poet looked astonished, and began to suspect he must have been a plagiarist all the time. Mr. Abernethy, however, soon undeceived him, and explained to him that he had that peculiar faculty of memory. His pupils had the greatest regard for him, and whenever he stood in the square of the Hospital, they crowded round him and looked upon him as an oracle, and if he noticed any of them they felt it the greatest compliment that could be paid them. All true Abernethians revere his memory.

It was observed that Mr. Abernethy gradually fell into bad health between the age of 60 and 70. He became pale, emaciated, and feeble. No one could tell what was the matter with him, and he did not know himself. I went to see him at his seat at Enfield. He was looking as pale as a corpse. After the first greeting, he said, "See what I am come to—this is all through not taking care of my digestive organs when I was young. Pray take care of your digestive organs; for if you do not, it sows the seeds of a premature death!" We parted, and in a fortnight he was no more! I may say of him with his favourite poet—

"He was a man—take him for all in all, I shall not look upon his like again."

One great man leads on to another. If there ever was an individual who was a great surgeon—who possessed a noble and generous mind, and a handsome exterior, -Sir Astley Cooper was that man. His excellent nephew, Mr. Bransby Cooper, has ably written his life; I therefore shall only speak of his works. Sir Astley was a true follower of Mr. Hunter. He was devoted to his profession, and was ever zealous in promoting the advancement of surgery as a science. He followed up Mr. Hunter's views in aneurism, and was the first who proposed to tie the carotid artery, which operation he performed with success. He also undertook the bold operation of tying the aorta, in which he succeeded—but the patient only lived forty hours. His work on Hernia, at the time it was written, was most valuable, and he laid down rules in the operation by which every surgeon might perform it with safety. We are indebted to him for his great work on Dislocations and Fractures of Joints—which will always be a work of reference. Also for his works on the Anatomy of the Thymus Gland; on the Anatomy of the Breast; and many other papers and communications published in the Transactions

of the Royal, and the Royal Medical and Chirurgical Societies.

As an operator none surpassed him. Possessing a thorough knowledge of anatomy, and a skilful hand, he had the courage to perform operations few surgeons dare do. In those days the use of chloroform and æther was unknown:—therefore, while he was using the knife or scalpel, he would say something kind and encouraging to the patient. I once assisted him in a very painful and intricate operation, and during the performance of it he said to the patient, "I fear, Sir, you do not find yourself on a bed of roses." "No, Sir Astley," replied he, "I feel the thorns." He had great penetration in disease, and on looking at a patient would often discover it, without asking a question. As an instance of this I will relate the following anecdote. A surgeon who had been a pupil of his, had what was considered to be the typhus fever. Being very ill, he expressed a wish to see his old master. Sir Astley, with the greatest kindness, went a few miles out of town to see him. On looking at him he turned round and said to his attendant, "Pray, Sir, where is the abscess?"—"There is no abscess, Sir Astley; he has the typhus fever."—"Let me examine."—He did so, and found a large collection of pus in his side, which he let out, and the patient recovered.

He was as great in his private as in his public character. Generous to a fault,—noble-minded, and always ready to do a service, if he deserved it, to any member of his profession. He was above envy, jealousy, or any mean petty feeling, and rejoiced in the prosperity of others. He had no idea of rivalry—he was too great—and because fortune had smiled upon him, he did not exult over others who had not been so favoured. Those in distress he always relieved, and did many acts of generosity to pupils and others who were not possessed of sufficient means for their education and support. He encouraged science in his life-

time, and left a very handsome legacy to found a prize at Guy's Hospital after his death. Pope has said—

" An honest man's the noblest work of God."

Such a man was Sir Astley Cooper! I have often walked in St. Paul's Cathedral to see the monuments of the "illustrious dead," and have gazed upon the beautiful statue of Sir Astley Cooper. I have only regretted one thing. On the opposite side of the south door there is a vacant space—why is it not occupied with a statue of Mr. Abernethy?

"When shall such heroes live again?"

Having brought forward such distinguished characters, there still remain some that I cannot pass unnoticed. Amongst the foremost stands the amiable, the excellent, and scientific Mr. Clift. Mr. Clift adored Mr. Hunter, and could never hear his name mentioned without an affectionate regard. He looked upon him as his "Magnus Apollo"-"The Morning Star of Memory." The death of Mr. Hunter almost overwhelmed him: but to show the regard and gratitude he felt towards him, he, in the most devoted manner, preserved the Hunterian Museum, before it belonged to this College, although not having more than seven shillings a week to do it with, and also to live upon. Such an example is perhaps unparalleled. But the true lovers of science are all of this character: M. Royer, of the Jardin des Plantes at Paris, told me some years ago that many of the followers and admirers of Cuvier worked under him for eight sous a day—thus showing they loved the food of the mind rather than that of the body. The zeal evinced by Mr. Clift, after he was elected Conservator of the Museum of this College, proved the truth of the regard he had for his master. He industriously pursued the course Mr. Hunter had adopted, and the maxims he had laid down. He not only preserved the collection, but knowing the views of

Mr. Hunter, added to it—kept up the arrangement of it, and assisted very materially, under very embarrassing circumstances, in making the Catalogue. He was a faithful servant to this College,—his whole soul was wrapped up in the science of it, and he was beloved by all the scientific men of his day.

Surgeons are greatly indebted to Mr. Samuel Cooper for his valuable works. His First Lines of Surgery, at the day they were written, were of great use to students. But Cooper's Surgical Dictionary is the one more particularly to be prized. It must always remain a classical and standard work. As a book of reference there is none equal to it. There are none of us, no doubt, who have not profitted by it. He quotes all the first authors—Hunter particularly, and at once brings the subject you wish to gain a knowledge of, before you. Mr. S. Cooper was educated at St. Bartholomew's Hospital—went into the Army, where he arrived at a high post—and lastly, became Professor of Surgery at University College, London.

To omit Sir Charles Bell would be unjust. The pains which he took to discover the function of the spinal nerves does him infinite credit. When by experiment he proved that there were two sets of nerves proceeding from the spinal chord,—the one governing the power of motion, and the other that of sensation,—he placed us in a position to explain many symptoms of the injuries and diseases of the spine which were not understood. We often see the power of motion lost in one or both limbs, and yet sensation remains, and on the contrary, that sensation is gone, and motion exists. The phenomena are accounted for by there being two sets of nerves supplying and belonging to each faculty. He wrote other works,—on Stricture, &c.; but the one that was the most amusing, was "The Anatomy of

Expression." Here he pourtrayed joy, grief, anger, revenge, hatred, and other passions. The vignettes expressed them in so beautiful a manner, that artists took advantage of them in their works. He also was the author of the Bridgewater Treatise on the Hand.

There are some who deserve a tribute to be paid to their memory: Mr. Earle, for instance. Although he made no particular discovery, yet he was ever active in endeavouring to improve his profession, and more particularly in the mechanical department of it. He wrote some few papers and observations on different subjects in surgery. He was a very kind-hearted, benevolent, and gentlemanly-mannered man, and every body who knew him regarded him. Young, also, was an example of a highly honourable distinguished surgeon, and a great lover of science, and more particularly that connected with his own profession. Mr. Langstaff was devoted to the pursuits Mr. Hunter followed, and formed a fine museum, many specimens from which are in this College. Mr. Key rose to great eminence in his profession: he was a fine operator, and a good surgeon, and had he lived would have accumulated a large The private and hospital practice of Mr. Liston I am not acquainted with; but he was a distinguished operator, and might in that department of surgery be justly compared to Dupuytren.

These great men, Sir, of whom I have been speaking, who are "to the grave gone down," were all descendants in science of Mr. Hunter's. They looked upon him as their polar star—they acknowledged him to be the fountain spring of all their knowledge—and they pursued zealously the foundation he had built for them. I am aware that within the limits of an Oration which is expected to occupy not more than an hour, I cannot do justice or even mention all the names of all the followers of Mr. Hunter.

I have spoken only of the departed; but I see, Mr. President, around me many who are true followers of Mr. Hunter—men who have advanced the science of surgery—who have devoted themselves to the study of anatomy, and have improved the knowledge of physiology. Science resembles a globe formed of diamonds, and he who adds one particle to that globe, becomes a part of it, and shines for ever!

This College, Sir, of late years has been highly favoured; for not only men of science, but men at the head of affairs, and of the most exalted station, have been numbered among our visitors. Two years ago His Royal Highness Prince Albert honoured us with his presence at this Oration, and afterwards went over the Museum. It is gratifying to know that His Royal Highness visited us not as a mere idle gazer, seeking only for curiosities, but it was with a truly scientific mind. His acute eye fixed itself at once upon the most interesting specimens; and in the questions he asked Professor Owen (for I, as one of the Council, had the honour of being present), he at the same time showed his knowledge of the subject, and evinced the interest he takes in science in general. His Royal Highness was pleased to express his admiration of the Museum; and it is the earnest wish of the Council that this will not be the last time the Prince will honour us with his presence.

It is now my sad duty to pay a tribute of respect to the memory of two great men, who, since our last anniversary, have passed from among us—I mean H. R. H. the Duke of Cambridge, and Sir Robert Peel. His Royal Highness was not only a promoter of everything that tended to charity and benevolence—he was also a zealous patron of science. Both these feelings combined to make him take a lively interest in the support of our hospitals. The office

which I had the honour to hold, of Surgeon-extraordinary to His Royal Highness, brought me occasionally into his presence, and on one of these occasions I had an opportunity of judging how deeply imbued he was with the feelings of a christian.

One of his equerries, a most valued friend of his, was seized, during the operation of cupping, with a fit of apoplexy. I was immediately called in, and lost no time in bleeding him as copiously as the urgency of the case required. He regained his consciousness, but his recovery was doubtful. As soon as he heard of what had occurred, the Duke of Cambridge called on me in person, to inquire after his friend. During his illness H. R. H. visited him daily. If he had been a member of his own family he could not have shown more solicitude. In administering comfort to his friend, he gave proof of his genuine piety. He assured him that the prince and the poor man were equal in the grave—that all alike must die—and that the only life we could lead was putting our trust in the Redeemer of the world. Well might England call His Royal Highness "The good Duke of Cambridge."

I shall purposely avoid speaking of politics. Sir Robert Peel was a trustee of this College, and took a lively interest in its welfare. He often visited the museum, and honoured Professor Owen with his friendship. In losing him we have lost a true friend, more particularly at this juncture. At the present time a sum of money is required to be granted by government to assist us in building an addition to the museum: had Sir Robert Peel been alive there is but little doubt that he would have used his utmost influence to promote so desirable an object for the advancement of science.

Any good that may accrue to our profession is always

gratifying. The Assistant-surgeons of the Navy have felt themselves aggrieved, and the grievance they have complained of is partly removed. They had no private cabin where they could pursue their studies, and keep up their medical and surgical knowledge. The Council of this College, on being applied to by them, felt great interest on their behalf. The President and Vice-Presidents waited upon the Lords of the Admiralty more than once to represent to them the injury complained of: but I regret to say without any favourable result. However, a Bill has since passed through Parliament, wherein the request of having a private cabin to themselves is granted. It is for the interest of the Navy, that their junior surgical officers should be treated with respect, and have those accommodations which will enable them to keep up their knowledge, and pursue their surgical studies.

The improvements which have occurred in surgery since the days of Mr. Hunter are numerous; but it would be a task not easily performed to enumerate them. I therefore shall only point out a few of the leading ones of latter years. Operative surgery has made a great advance; operations are now performed which a few years ago were thought impracticable. Our intercourse with foreign surgeons, and particularly with those of France, has tended to add to our knowledge in this department. Our treatment of disease is greatly improved—the methods we employ in reducing dislocation and fractures are superior to those of former days—morbid anatomy is better understood, and the whole art of Surgery stands upon a superior basis.

An injury to a tenden in former days was considered a most dangerous accident. Now, in deformities, and particularly in those of the feet, the tendo-achillis is divided with impunity, without danger, and allowing the limb to be restored to its proper shape. The introduction of litho-

trity, or the crushing of the stone in the bladder, has prevented some few operations by lithotomy, but at the same time it requires great care in the selection of cases. Where there are only small calculi, this mode of proceeding may answer very well, but when they are large it is doubtful whether it should be employed. I have seen some few cases where large calculi have been attempted to be broken down, and as all the fragments could not be got away, the sharp points of the broken-down surfaces have caused inflammation of the bladder, and endangered the life of the patient.

Who, twenty years ago, nay, even ten, could have imagined that an individual breathing the subtle vapour of æther and chloroform, should so "steep the senses in forgetfulness," that a limb severed from the body, or a malignant disease hurled from its seat, should not be felt; that in fact no pain should be known, and that he should awake as from a dream, and find the suffering part removed? It can only be considered as a boon granted to mankind by Providence! The full value of the inhalation of æther and chloroform is not yet even known; and it is my opinion that the individual who first made the discovery ought to receive a public reward. If the statistics were taken of the pain that has been prevented in important operations at our public hospitals—the misery that has been relieved through their influence—they would amount to thousands.

Science, like a flowing river, is never exhausted.—

But we are not rustics—we do not expect the stream of science to flow out. While, Sir, we have such Professors as this College of Surgeons, and the world in general, can boast of, we need not feel the least alarmed. The Council,

<sup>&</sup>quot;Rusticus expectat dum defluat amnis; at ille Labitur, et labetur in omne volubilis ævum."

ever anxious to foster and promote the interests of surgery, careful that none but those who possess the highest qualities of genius shall be elected to any office of responsibility within these walls, and also desirous to advance the true interests of the profession, are fully sensible of the important trust they have committed to their charge for the improvement of science. As a proof of this, we have only to ask who fill the Professors' chairs in this theatre? And when I answer Professor Owen, Professor Paget, and Mr. Quekett, it cannot be denied that the heads of this College have done their duty. Professor Owen has not only maintained the high character we have always possessed since the days of Mr. Hunter, but he has gained the admiration of Europe nay of the whole world! Professor Paget, year by year, in the most luminous manner, illustrates and explains the Hunterian Museum, taking the preparations in the order in which they are arranged. He has already thrown new light on inflammation, and also on the reparation of wounds. Mr. Quekett likewise teaches by the microscope the minute structure of the various parts and organs of the body, and has written a hystiological catalogue of the greatest merit and value. It may be said with truth, that science at the Royal College of Surgeons of England stands higher than it has ever been known to do since the time of Mr. Hunter.

Having compared science to a river which is never exhausted, I feel I might also compare it to a fountain of health; for who, being sick, or having disease, can recover without its aid? I therefore shall conclude this oration by quoting some lines, which were written in Latin in the year 1370, over a spring at Carlsbad. The Latin is as follows:—

"Felix per secula mana

Fons sacer, humano generique salutifer esto!
Redde seni validos vires—pavidæquæ puellæ,
Formosam confer faciem—morbisque medere.
Omnibus, et patrios accedat lætior oras
Quisquis in hâc lymphâ fragiles immerserat artus."

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The poet by whom these verses were written is unknown. By another unknown poet they have been translated into English:—

"Flow kindly on for ever, sacred spring!
Still to mankind health's precious blessing bring.
To feeble age restore its strength decay'd.—
Her faded beauty to the drooping maid.
On all disease exert thy healing power,
And to their native shores, in happier hour,
Let all return, who hither come to lave
The suffering limb, or sip thy limpid wave."

Then, Sir, may the "sacred spring" of science "flow kindly on for ever!"

THE END.